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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,801	09/23/2003	Winston Zonh Ho		4093

7590 01/30/2007
Winston Zonh Ho
14541 Langhill Drive
Hacienda Heights, CA 91745

EXAMINER

KISH, JAMES M

ART UNIT	PAPER NUMBER
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3737

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/668,801

Applicant(s)

HO ET AL.

Examiner

James Kish

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-12 and 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12 and 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed October 19, 2006 have been fully considered but they are not persuasive.

Applicant has amended independent claims 1 and 11 by including subject matter from claims 3 and 13, respectively. The additions to the independent claims comprise, "where said thin layer of tissue, <1 cm in thickness, is posterior fornix of vaginal wall, or rectal wall between the superior and inferior rectal valves." Also, "tissue region" has been changed to "a thin layer of tissue." Examiner does not believe that the claims as amended place the application in condition for allowance. The prior art teaches that it is possible to detect less than or equal to 5 grams of ICG through 2 cm of tissue, thereby including the claimed <1 cm. Also, while not explicitly disclosing the posterior fornix of the vaginal wall and the rectal wall, the probe of Haaland is used in the vaginal and rectal areas and when combined with the method of Chan it would be obvious to one of skill in the art to image through these specific areas due to the thickness requirements of such a system and the thickness attributed to those areas.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-12 and 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan et al. (US Patent No. 6,175,759) in view of Haaland et al. (US Patent No. 5,596,992). Chan discloses a non-invasive multispectral energy system made up of a transilluminating radiating means that illuminates soft tissues that have been treated with a contrast agent (see Abstract). It is an object of the invention to provide a system for early detection of breast cancer and internal bleeding. A diode laser is used to illuminate the area of interest at wavelengths from a range between 750 nm and 1,000 nm. The preferred contrast agent is indocyanine green, or ICG (column 1, lines 36-51). A recommended dosage of ICG is 400 micrograms/kilogram, or 0.4 mg/kg (column 5, lines 60-62). It has been proven that it is possible to detect less than or equal to 5 grams of ICG through 2 cm of tissue (column 5, lines 21-26). The ICG in a tumor or blood pool will be excited by a 780 nm gallium arsenide diode laser. The fluorescent emission at the surface will be filtered at 835 nm before detection in the CCD camera (column 6, lines 1-4). However, Chan does not explicitly disclose an optical fiber to deliver and detect the light used to illuminate the area of interest. Haaland teaches a fiber optic probe (see Figure 7) used to irradiate an area of interest. The received spectra are used to classify tissue types, such as cancerous tissue of the cervical or colorectal area (column 1, lines 59-62). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a fiber optic probe, such as that taught by Haaland, in the invention disclosed by Chan to provide a method for delivering and receiving light used for spectral analysis to and from the area of interest.

With respect to claims 25 and 26, Chan discloses that internal bleeding is often detected in the abdomen (column 3, lines 40-45).

Conclusion

Also see Lacoste et al, US Patent No. 6,676,601 as related prior art.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Kish whose telephone number is 571-272-5554. The examiner can normally be reached on 8:30 - 5:00 ~ Mon. - Fri..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMK


ELENI MANTIS MERCADER
SUPERVISORY PATENT EXAMINER